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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,257	10/20/2003	Mark Beaumont	DB001070-000	2891
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JONES DAY				
500 GRANT STREET				
SUITE 3100				
PITTSBURGH, PA 15219-2502				
EXAMINER				
HUISMAN, DAVID J				
ART UNIT		PAPER NUMBER		
2183				
MAIL DATE		DELIVERY MODE		
06/09/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/689,257

**Applicant(s)**

BEAUMONT, MARK

**Examiner**

DAVID J. HUISMAN

**Art Unit**

2183

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
- Paper No(s)/Mail Date 3/3/2008.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-20 and 26 have been examined.

#### ***Papers Submitted***

2. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment as received on 8/24/2007

#### ***Specification***

3. Applicant is asked to review the disclosure and ensure that it is correct. Specifically, in paragraph [0070] on page 13 (with reference to Figs.15B-C), it appears that, to transpose data with right/upwards shifts, the initial counts must be set using  $(C+R+1) \text{ MOD size}$  and not  $(X+Y+1) \text{ MOD size}$ , as disclosed. Similarly, the formulas also appear to be wrong for left/downwards, left/upwards, and right/downwards transpose. The examiner questions whether applicant has reversed the formulas? In paragraph [0071], with reference to Fig.18, the counts are calculated via  $(X+Y+1) \text{ MOD size}$ , but east/north shifts with such counts do not produce a transpose. Applicant is asked to review the figures, the formulas, and other pertinent part of the disclosure that appear to be incorrect, and provide appropriate corrections, or explain why the examiner is mistaken.

#### ***Withdrawn Rejections***

4. Applicant, by way of amendment, has overcome the prior art rejections set forth in the previous Office Action for claims 1-20 and 26. Consequently, these rejections are hereby

withdrawn by the examiner. However, upon further consideration, a new ground(s) of rejection is applied below.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-20 and 26 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner is not clear on how the claimed invention (claims 1, 11, and 26) is functioning. Consequently, the metes and bounds of the claim are unknown. Specifically, based on the disclosure and figures alone, it is not clear how each element in a diagonal of length N receives the original data held by every other element in that diagonal. That is, in the examples set forth in Fig.16-19, it appears one diagonal comprises elements a1, h2, g3, f4, e5, d6, c7, and b8. However, it is not clear from Fig.19 how the element originally holding a1 ends up holding the rest of the data, how the element originally holding h2 ends up holding the rest of the data, and so on.

7. The examiner requests a detailed example showing how each element receives data originally held by every other element in that diagonal. It is requested that applicant use the matrix of Fig.15B or 15C since they are smaller and will be easier to understand. Please set forth each of the claimed diagonals, which elements are inputted to which elements (and how the inputting occurs), the path each data item takes when shifted, and at what point each element holds every other data item held by other elements in that diagonal. **Essentially, the examiner**

**would like to see a detailed step-by-step explanation of how to transpose Fig.15A into either 15B or 15C.** For instance, the examiner is under the impression that in Fig.15A and Fig.15B, the original diagonals comprise D1 (a, n, k, h), D2 (e, b, p, l), D3 (I, f, c, q), and D4 (m, j, g, d). At what point is 'a' stored in n's original element, k's original element, and l's original element? Are some of the elements shifted in different directions? The examiner feels that a fully detailed example is necessary in understanding the claimed invention and finding any remaining relevant prior art.

8. All dependent claims are also rejected under 35 U.S.C. 112, 2nd paragraph, for being unclear and indefinite, because they are dependent on indefinite claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID J. HUISMAN whose telephone number is (571)272-4168. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David J. Huisman/  
Primary Examiner, Art Unit 2183  
April 18, 2008